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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,068	07/15/2003	Kai H. Chang	Chang 6-17-28	7129

7590

01/13/2006

Fitel USA Corp.
Room 2H02
2000 Northeast Expressway
Norcross, GA 30071

EXAMINER

HOFFMANN, JOHN M

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/620,068	Applicant(s) CHANG ET AL.	
	Examiner John Hoffmann	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-8 is/are rejected.
- 7) ☒ Claim(s) 2 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Terminal Disclaimer

The terminal disclaimer filed on 31 October 2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US Patent 6776012 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Allowable Subject Matter

Claims 2 and 10 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 3-6, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Backer 5180411 in view of Tuminaro 6496627 or Lemaire 5478371

**A method for making optical fiber, the method comprising the steps of:
forming a glass core rod by soot deposition, the glass core rod having a core
region surrounded by a cladding region,**

See Backer at col. 9, lines 34-42.

dehydrating the glass core rod;

See Backer at col. 13, lines 24-40.

consolidating the glass core rod to form an optical fiber preform;

See Backer at col. 10, lines 39-40.

drawing fiber from the optical fiber preform;

See Backer at figure 3.

and exposing the drawn optical fiber to an atmosphere containing deuterium at room temperature.

Backer does not teach this. Tuminaro discloses that deuterium exposure results in improved long term signal attenuation performance. See col. 2, lines 47-60, and col. 3, line 40 to col. 4, line 9. It would have been obvious to improve the long term performance of the Backer fiber, by exposing it to deuterium as disclosed by Tuminaro. Col. 17 lines 56-59 discloses the room temperature exposure.

Using Lemaire instead: Lemaire teaches to treat fibers with deuterium at room temperature to make laser cavities, filters, multiplexers and demultiplexers (col. 1, lines 25-33, col. 2, lines 48-58). It would have been obvious to treat the Backer fiber with deuterium as taught by Lemaire so as to make laser cavities, filters, multiplexers and/or demultiplexers, so that one can filter, multiplex, demultiplex, and/or do whatever one usually does with laser cavities.

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Claim 3: Since Tuminaro does the same thing that applicant does (for substantially the same reason – to cure defects) one would expect substantially the same result.

Claim 8: See Backer, col. 9. lines 34-38.

Claims 4-6: see col. 9, lines 47-48 of Backer: the additional overcoating cladding soot is the same thing as “overclad”. The overclad would be dehydrated and consolidated the same time the rest of preform is dehydrated and consolidated.

Claim 9: the “thereafter” limitation is not given any patentable weight. It is deemed that patents only cover the past and present – not the future. No one has the ability to predict the future. Alternatively, it is deemed that “the aging loss” is interpreted as “an aging loss” It is deemed that an aging loss of an aging of 1 microsecond would clearly be less than 0.04 db/km. As to the transmission loss: Backer does not disclose the claimed loss. It would have been obvious to make perform the Backer/Tuminaro method, so that the fiber has the lowest possible transmission loss and the loss possible aging loss increase. It is noted that any evidence or argument that indicates that one of ordinary skill would not know how to have the claimed loss and loss increase, may be used as evidence in a rejection that the present invention is not enable, or that the claim lack a critical step.

Claims 1 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oyobe 5262365 in view of Tuminaro 6496627 (or Lemaire) and Baumgart 4820322.

Oyobe discloses the invention except for the deuterium treatment and the overcladding. See Oyobe, col. 16, lines 1- 40. The heat treatment is deemed to be a dehydration (compare to Oyobe col. 12, lines 40-48.)

Tuminaro discloses that deuterium exposure results in improved long term signal attenuation performance. See col. 2, lines 47-60, and col, 3, line 40 to col. 4, line 9. It would have been obvious to improve the long term performance of the Oyobe fiber by exposing it to deuterium as disclosed by Tuminaro.

Baumgart discloses in col. 1 that one can make more fiber by overcladding a preform made by MCVD. That is, one can scale up an MCVD process - but that such requires overcladding with a tube. It would have been obvious to scale up the Oyobe process to make the preforms large 1 (as taught by Baumgart, and including overcladding with a tube) so that one can increase productivity.

For using Lemaire – see how Lemaire is applied above. It would have been obvious to treat the Oyobe fiber as taught by Lemaire to be able to create the fiber devices that Lemaire discloses.

Response to Arguments

Applicant's arguments filed 31 October 2005 have been fully considered but they are not persuasive.

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As to the Chang declaration (signed 10/25/05): such fails to demonstrate prior invention. Although it does establish conception of the invention of at least claim one, there is no showing of diligence. As per MPEP 715.07(a): "Where conception occurs prior to the date of the reference, but reduction to practice is afterward, it is not enough merely to allege that applicant or patent owner had been diligent. Ex parte Hunter, 1889 C.D. 218, 49 O.G. 733 (Comm'r Pat. 1889). Rather, applicant must show evidence of facts establishing diligence." The declaration does not provide sufficient evidence of facts establishing diligence.

As indicated in MPEP 715.07(a)

In patent law, an inventor is either diligent at a given time or he is not diligent; there are no degrees of diligence. An applicant may be diligent within the meaning of the patent law when he or she is doing nothing, if his or her lack of activity is excused. Note, however, that the record must set forth an explanation or excuse for the inactivity; the USPTO or courts will not speculate on possible explanations for delay or inactivity. See *In re Nelson*, 420 F.2d 1079, 164 USPQ 458 (CCPA 1970).

There are numerous gaps in the timeline set forth in the declaration. For example. The periods June 7-June 12, 2000; June 14-June 22, 2000; June 23-June 29, are just a few periods for which there is no mention as activity, or explanation for inactivity.

As indicated in MPEP 2138.06:

An applicant must account for the entire period during which diligence is required. Gould

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v. Schawlow, 363 F.2d 908, 919, 150 USPQ 634, 643 (CCPA 1966) (Merely stating that there were no weeks or months that the invention was not worked on is not enough.); In re Harry, 333 F.2d 920, 923, 142 USPQ 164, 166 (CCPA 1964) (statement that the subject matter "was diligently reduced to practice" is not a showing but a mere pleading). A 2-day period lacking activity has been held to be fatal. In re Mulder, 716 F.2d 1542, 1545, 219 USPQ 189, 193 (Fed. Cir. 1983) (37 CFR 1.131 issue); Fitzgerald v. Arbib, 268 F.2d 763, 766, 122 USPQ 530, 532 (CCPA 1959) (Less than 1 month of inactivity during critical period. Efforts to exploit an invention commercially do not constitute diligence in reducing it to practice. An actual reduction to practice in the case of a design for a three-dimensional article requires that it should be embodied in some structure other than a mere drawing.); Kendall v. Searles, 173 F.2d 986, 993, 81 USPQ 363, 369 (CCPA 1949) (Diligence requires that applicants must be specific as to dates and facts.).

The period during which diligence is required must be accounted for by either affirmative acts or acceptable excuses. Rebstock v. Flouret, 191 USPQ 342, 345 (Bd. Pat. Inter. 1975); Rieser v. Williams, 225 F.2d 419, 423, 118 USPQ 96, 100 (CCPA 1958)

As to the Harman affidavit:

First it is noted that MPEP 2138.06 indicates:

The diligence of attorney in preparing and filing patent application inures to the benefit of the inventor. Conception was established at least as early as the date a draft of a patent application was finished by a patent attorney on behalf of the inventor. Conception is less a matter of signature than it is one of disclosure. Attorney does not prepare a patent application on behalf of particular named persons, but on behalf of the true inventive entity. Six days to execute and file application is acceptable. Haskell v. Coleburne, 671 F.2d 1362, 213 USPQ 192, 195 (CCPA 1982). See also Bey v. Kollonitsch, 866 F.2d 1024, 231 USPQ 967 (Fed. Cir. 1986) (Reasonable diligence is all that is required of the attorney. Reasonable diligence is established if attorney worked reasonably hard on the application during the continuous critical period. If the attorney has a reasonable backlog of unrelated cases which he takes up in chronological order and carries out expeditiously, that is sufficient. Work on a related case(s) that contributed substantially to the ultimate preparation of an application can be credited as diligence.).

Affiant only alleges diligence with no evidence to support it. The 5 month period (Jan 26- June 26) to prepare and file the application is not deemed to be reasonable.

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There is no explanation or evidence for the inactivity. Affiant indicates that the time period was typical. Examiner notes that typical is not synonymous with diligent.

As to the rejection of Backer in view of Lemaire, it is argued that Backer does not teach making gratings and Lemaire does not make the Backer fibers. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

And from MPEP 2145:

"The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference.... Rather, the test is what the combined teachings of those references would have suggested to those of ordinary skill in the art." *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). See also *In re Sneed*, 710 F.2d 1544, 1550, 218 USPQ 385, 389 (Fed. Cir. 1983) ("[I]t is not necessary that the inventions of the references be physically combinable to render obvious the invention under review."); and *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973) ("Combining the teachings of references does not involve an ability to combine their specific structures.").

In other words: it does not matter that one would not end up with Backer's final fiber, when one uses the Lemaire process in combination the Backer process. Rather, as indicated in the rejection, one would have been motivated to create additional devices, filters, laser cavities, etc. from the Backer fiber, by using the Lemaire process.

It is also argued that the present invention is directed to fibers having a constant refractive index along the length of the fiber – but Lemaire's process has periodic variations. This is largely irrelevant because the claims are broadly written – to

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the degree that the claim does not exclude Lemaire's profile. Moreover, the claims do not even require any change in refractive index. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

It is also argued that since Lemaire teaches hydrogen and deuterium are interchangeable, Lemaire teaches away from the present invention. It is inescapable that Lemaire teaches to treat fibers with deuterium. The fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

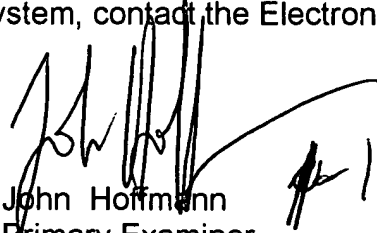
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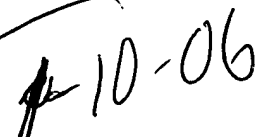
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


John Hoffmann
Primary Examiner
Art Unit 1731



jmh